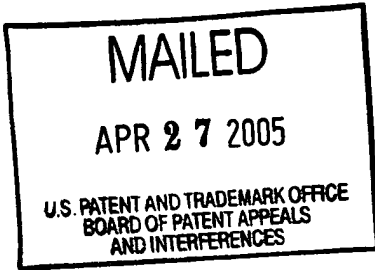


The opinion in support of the decision being entered today was **not** written for publication and is **not** binding precedent of the Board.

Paper No. 16

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES



Ex parte STEVEN H. WALKER  
and RAYMOND C. FROBOSILO

Appeal No. 2005-0655  
Application No. 09/896,505

ON BRIEF

Before MCQUADE, NASE and BAHR, Administrative Patent Judges.  
MCQUADE, Administrative Patent Judge.

DECISION ON APPEAL

Steven H. Walker et al. appeal from the final rejection (Paper No. 6) of claims 1 through 11, all of the claims pending in the application.

THE INVENTION

The invention relates to "a structural metal member of substantially U-shaped cross section which can be used in a roof truss or in a floor joist" (specification, page 1).

Representative claim 1 reads as follows:

1. An elongate metallic structural member having an elongate, planar web surface having longitudinal edges; a first leg member and a second leg member depending to one side of said web member from said longitudinal edges, said first leg member and said second leg member being mirror images, said first leg member and said second leg member terminating with outwardly extending hollow flanges, each outwardly extending flange having a margin member juxtaposed said respective leg member.

#### THE PRIOR ART

The references relied on by the examiner to support the final rejection are:

Seccombe et al. (Seccombe)	5,535,569	Jul. 16, 1996
Dolati et al. (Dolati)	5,771,653	Jun. 30, 1998

#### THE REJECTION

Claims 1 through 11 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Dolati in view of Seccombe.

Attention is directed to the brief (Paper No. 11) and answer (Paper No. 12) for the respective positions of the appellants and examiner regarding the merits of this rejection.<sup>1</sup>

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<sup>1</sup> In both the final rejection and answer, the examiner omitted claims 6 and 8 from the statement of the rejection. The accompanying explanations of the rejection indicate, however, that the omission was inadvertent.

DISCUSSION

Dolati, the examiner's primary reference, discloses a rolled metallic chord for use in the construction of roof trusses. The chord embodiment 23 illustrated in Figure 3 comprises a base 24 and a pair of mirror image legs 26 and 27 depending from respective edges of the base. Each leg includes, in sequence from the base, a first planar portion 28, 32 perpendicular to the base, an inwardly sloping planar portion 29, 33, a planar attachment portion 30, 34 perpendicular to the base, and a flange 31, 35 having an outwardly directed portion 31a, 35a, an upwardly directed portion 31b, 35b coplanar with the associated planar portion 28, 32, and an inwardly directed portion 31c, 35c terminating in a longitudinal edge 31d, 35d spaced from the attachment portion. Figure 4 shows that the chord may be reinforced by channel-shaped reinforcement tracks 43 secured to the legs. Of the configuration of the flanges 31 and 35, Dolati states that

[t]he particular outwardly, upwardly and inwardly directed shape of the leg flange portions of the present invention increases their stiffening power and prevents hang up of the edges on objects on a jig table or on the top of a wall along which the chord is pushed or dragged and makes the chord safer to handle. Furthermore, the particular configuration of the flange portions of the chord legs enables installers to walk on the bottom chord of a truss without twisting and bending the chord [column 2, lines 26 through 34].

It is not disputed that Dolati teaches, or would have suggested, a structural member responsive to all of the limitations in claim 1 except for the one requiring each flange to have a margin member juxtaposed its respective leg member. As indicated above, the "margin members" of Dolati's flanges 31 and 35, i.e., inwardly directed portions 31c, 35c, terminate in longitudinal edges 31d, 35d which are spaced from their respective leg members. To cure this shortcoming, the examiner turns to Seccombe.

Seccombe also discloses a rolled metallic member for use in the construction of roof trusses. In general, the member consists of "a web 9 comprising the central zone of the original strip and two hollow flanges 10 and 11 respectively formed from the edge zones of the strip excluding their edge margins" (column 4, lines 1 through 4). Seccombe teaches that

each hollow flange is formed from an edge zone of the original strip. Each such edge zone is returned on itself as the strip is roll-formed to form a hollow flange, and the free edge margin of the edge zone is held flatly against one side of the central zone of the strip between the edge zones. The contacting areas are secured together by fastening means, either continuously along a longitudinal line of the member or intermittently at spaced intervals along such a line, so that each hollow flange is a substantially complete tube and the structural member's web, being composed of the central zone and the edge margins of the original strip, is, at least in part, of double thickness. This construction results in a structural member, when functioning as a beam, that has flanges that are more

resistant to bending, or a web that is more resistant to shear, or both of these attributes, by comparison with conventional I-beam or channel sectioned members made from a similarly sized original strip [column 2, lines 22 through 39].

Although the appellant's observation that the metallic members respectively disclosed by Dolati and Seccombe differ somewhat in physical configuration is well taken, it is axiomatic that non-obviousness cannot be established by attacking references individually where the rejection is based upon the teachings of a combination of references. In re Merck & Co., Inc., 800 F.2d 1091, 1097, 231 USPQ 375, 380 (Fed. Cir. 1986). In this regard, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. In re Keller, 642 F.2d 413, 425, 208 USPQ 871, 881 (CCPA 1981).

Notwithstanding their configurational differences, the rolled metallic members disclosed by Dolati and Seccombe serve identical purposes, i.e., the construction of roof trusses, and to this end both include hollow flange elements. Seccombe's teaching of the bending and shear resistance advantages afforded

by hollow flanges which have their free edge margins juxtaposed and attached to the components from which the flanges extend would have furnished the artisan with ample suggestion or motivation to provide Dolati's flanges 31 and 32 with margins juxtaposed (and attached) to their respective legs 26 and 27 to supplement the stiffening characteristics desired by Dolati. As so modified in view of Seccombe, the Dolati metallic structural member would respond fully to the limitations in independent claim 1, as well as to the limitations in dependent claims 2, 6, 8, 10 and 11. Hence, the combined teachings of these references justify the examiner's conclusion that the differences between the subject matter recited in these claims and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art.

Accordingly, we shall sustain the standing 35 U.S.C. § 103(a) rejection of claims 1, 2, 6, 8, 10 and 11 as being unpatentable over Dolati in view of Seccombe.

We shall not sustain, however, the standing 35 U.S.C. § 103(a) rejection of dependent claims 3 through 5, 7 and 9 as being unpatentable over Dolati in view of Seccombe.

Each of claims 3 through 5, 7 and 9, either directly or by virtue of its dependency, further defines the claimed metallic

structural member as having a second web member.<sup>2</sup> Conceding that the Dolati structural member does not comprise a second web member of the type set forth in these claims, the examiner nonetheless concludes that it would have been obvious to provide the structural member with same by somehow rearranging Dolati's channel-shaped reinforcement tracks 43 (see page 4 in the answer). Dolati, however, whether considered alone or in conjunction with Seccombe, does not provide the requisite evidentiary support for this conclusion.

#### SUMMARY

The decision of the examiner to reject claims 1 through 11 is affirmed with respect to claims 1, 2, 6, 8, 10 and 11, and reversed with respect to claims 3 through 5, 7 and 9.

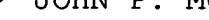
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<sup>2</sup> The recitation of "said second web member" in claim 7 lacks a proper antecedent basis. Appropriate steps should be taken to correct this informality in the event of further prosecution before the examiner.


Appeal No. 2005-0655  
Application No. 09/896,505

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED-IN-PART

  
JOHN P. MCQUADE  
Administrative Patent Judge

  
JEFFREY V. NASE  
Administrative Patent Judge

  
JENNIFER D. BAHR  
Administrative Patent Judge

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Appeal No. 2005-0655  
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